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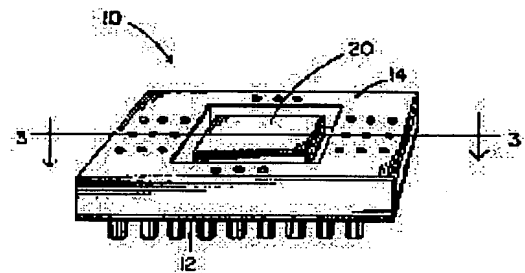
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## (54) HEAT SINK INTEGRATED SEMICONDUCTOR PACKAGE

(57)Abstract:

PURPOSE: To provide a semiconductor package which is directly fixed to an integral heat sink of injection-molded aluminum nitride, for providing a thermal relationship between a heat generator and a heat dissipation means to a semiconductor chip.

CONSTITUTION: A substrate is formed for fixedly mounting a semiconductor chip and a multi-layered housing, via a planar surface of a heat sink element 12. The housing is made up of a plurality of layers of dielectric glass ceramic and etched metal conductive layers. The housing is formed on a top of a heat sink substrate, having a recess for direct fixed connection to the heat sink 12 therein and in which recess the semiconductor chip is to be mounted. The semiconductor chip is fixedly mounted to the etched metal layer of the housing 14 by a known electrical connecting method, such as wire bonding or tab tape. A cover plate 20 is mounted on the recess.



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